



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

ADVISORY COUNCIL REGULAR MEETING

WEDNESDAY
SEPTEMBER 8, 2004
10:00 A.M.

SEVENTH FLOOR
BOARD ROOM

AGENDA

CALL TO ORDER

Opening Comments
Roll Call

Elinor Blake, Chairperson
Clerk

PUBLIC COMMENT PERIOD

Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3. *The public has the opportunity to speak on any agenda item. All agendas for Advisory Council meetings are posted at the District, 939 Ellis Street, San Francisco, at least 72 hours before a meeting. At the beginning of the meeting, an opportunity is also provided for the public to speak on any subject within the Council's purview. Speakers are limited to five minutes each.*

CONSENT CALENDAR

1. Approval of Minutes of July 14, 2004

COMMITTEE REPORTS

2. Report of the Air Quality Planning Committee Meeting of August 3, 2004 Chair Brazil

The Council will consider the recommendations of the Air Quality Planning Committee regarding the District's Ozone Control Strategy.

3. Report of the Technical Committee Meeting of August 4, 2004 Chair Bedsworth

The Council will consider the recommendations of the Technical Committee regarding the District's Ozone Control Strategy.

4. Report of the Public Health Committee Meeting of August 9, 2004

Chair Weiner

The Council will consider the recommendations of the Committee regarding indoor air quality.

OTHER BUSINESS

5. Report of the Executive Officer/APCO

Jack Broadbent

6. Resolution Concerning Aspects of the California Performance Review (CPR) commission of relevance to air quality.

The Council will consider recommendations to the Board concerning air quality related recommendations of the CPR.

7. Air & Waste Management Association (A&WMA) Annual Exhibition & Meeting

Advisory Council members Altshuler, Bramlett, Brazil, Drennen, Hayes, Holtzclaw, Kurucz, and Torreano will report out on their attendance at the 97th A&WMA Exhibition & meeting held June 22-25 in Indianapolis, Indiana.

8. Report of Advisory Council Chair

Elinor Blake

9. Council Member Comments/Other Business

Council or staff members on their own initiative, or in response to questions posed by the public, may: ask a question for clarification, make a brief announcement or report on their own activities, provide a reference to staff about factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda.

10. Time and Place of Next Meeting

10:00 a.m., Wednesday, November 10, 2004, 939 Ellis Street, San Francisco, California 94109.

11. Adjournment

EB:jc

CONTACT CLERK OF THE BOARDS - 939 ELLIS STREET SF, CA 94109

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- To submit written comments on an agenda item in advance of the meeting.
- To request, in advance of the meeting, to be placed on the list to testify on an agenda item.
- To request special accommodations for those persons with disabilities notification to the Clerk's Office should be given in a timely manner so that arrangements can be made accordingly.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET, SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

CLERK OF THE BOARDS OFFICE:
MONTHLY CALENDAR OF DISTRICT MEETINGS

SEPTEMBER 2004

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i> - CANCELLED	Wednesday	1	9:45 a.m.	Board Room
Advisory Council Executive Committee	Wednesday	8	9:00 a.m.	Room 716
Advisory Council Regular Meeting	Wednesday	8	10:00 a.m.	Board Room
Advisory Council Public Health Committee - CANCELLED	Wednesday	8	12:30 p.m.	Room 716
Board of Directors Mobile Source Committee <i>(Meets 2nd Thursday each Month)</i> - CANCELLED	Thursday	9	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Public Outreach Committee <i>(Meets 2nd Monday every other Month)</i>	Monday	13	9:45 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	15	9:45 a.m.	Board Room
Regional Agency Coordinating Committee – (RACC)	Friday	17	1:30 p.m.	<u>Location:</u> MTC 101 – 8 th St. Oakland, CA 94607
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday each Month)</i> - RESCHEDULED	Wednesday	22	9:45 a.m.	4 th Floor Conf. Room
Board of Directors Stationary Source Committee <i>(Meets 4th Monday every other Month)</i>	Monday	27	9:30 a.m.	Board Room
Board of Directors Executive Committee <i>(Meets 5th Wednesday of Months that have 5 Wednesdays)</i>	Wednesday	29	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday each Month)</i>	Thursday	30	9:45 a.m.	4 th Floor Conf. Room

OCTOBER 2004

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	6	9:45 a.m.	Board Room
Advisory Council Joint Air Quality Planning & Technical Committees	Tuesday	12	9:30 a.m.	Board Room
Board of Directors Legislative Committee <i>(Meets on an as needed basis)</i>	Wednesday	13	9:30 a.m.	Board Room
Board of Directors Mobile Source Committee <i>(Meets 2nd Thursday each Month)</i>	Thursday	14	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	20	9:45 a.m.	Board Room
Advisory Council Public Health Committee	Monday	25	1:30 p.m.	Room 716
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday each Month)</i>	Wednesday	27	9:45 a.m.	4 th Floor Conf. Room

NOVEMBER 2004

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	3	9:45 a.m.	Board Room
Advisory Council Executive Committee	Wednesday	10	9:00 a.m.	Room 716
Advisory Council Regular Meeting	Wednesday	10	10:00 a.m.	Board Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	17	9:45 a.m.	Board Room
Board of Directors Stationary Source Committee <i>(Meets 4th Monday every other Month)</i>	Monday	22	9:30 a.m.	Board Room
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday each Month)</i>	Wednesday	24	9:45 a.m.	4 th Floor Conf. Room

MR:hl
8/26/04 (7:45 a.m.)
P/Library/Calendar/Moncal

AGENDA NO. 1

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

DRAFT MINUTES

Advisory Council Regular Meeting
10:00 a.m., Wednesday, July 14, 2004

CALL TO ORDER Chairperson Blake called the meeting to order at 10:09 a.m.

Opening Comments There were none.

Roll Call **Present:** Elinor Blake, Chairperson, Sam Altshuler, P.E., Diane Bailey, Louise Bedsworth, Ph.D., Sanjiv Bhandari, Jeffrey Bramlett, Harold Brazil, Irvin Dawid, Emily Drennen, Fred Glueck, John Holtzclaw, Ph.D., Kraig Kurucz, Norman A. Lopera, Jr., Kevin Shanahan, Victor Torreano, Linda Weiner.
Absent: Robert Bornstein, Ph.D., William Hanna, Stan Hayes, Brian Zamora.

PUBLIC COMMENT PERIOD There were no public comments.

CONSENT CALENDAR

1. **Approval of Minutes of March 10, 2004.** Dr. Holtzclaw requested that in the sixth bullet on page three “to” be added prior to “explicate.” Mr. Altshuler moved approval of the minutes as corrected; seconded by Dr. Holtzclaw; carried unanimously. Mr. Altshuler added that although the speaker on indoor air quality may have referred to a “little smog factory within the home” the statement is incorrect from a technical and scientific point of view and sends the wrong message.

COMMITTEE REPORTS

2. **Report of the Air Quality Planning Committee Meeting of June 15, 2004.** Mr. Brazil stated the Committee has been reviewing the District’s Ozone Control Strategy development. The Committee has not yet adopted recommendations but will meet on Tuesday, August 3 at 1:30 p.m. to discuss and develop them for subsequent submittal to the Advisory Council on September 8.
3. **Report of the Public Health Committee Meeting of May 12, 2004.** Ms. Weiner stated the Committee discussed the District’s Toxics New Source Review program, for which the final rule-making has been postponed. The Committee also discussed the Community Air Risk Evaluation (CARE) program and adopted some recommendations that will be presented to the Council today. The next meeting of the Committee is scheduled for Monday, August 9 at 1:30 p.m.
4. **Report of the Technical Committee Meeting of June 3, 2004.** Dr. Bedsworth stated the Committee received staff presentations on nitrogen oxide (NOx) controls and the state’s Emission Factor (EMFAC) 2002 model. The Committee will adopt recommendations on the District’s Ozone Control Strategy on August 4 at 1:30 p.m. Thereafter, it will then address alternate fuels.

- 5. Report of the Executive Committee Meeting of July 14, 2004.** Chairperson Blake stated the Committee met this morning and the Committee Chairs have reported on what was discussed. On September 8 the Council will recommendations for staff on the 2004 Ozone Strategy, which will be reviewed by the Governing Board in November. Public meetings on the document will be held throughout the Bay Area in the fall. The full Council will receive a presentation in November on the Smog Check II program on which the council made recommendations last year.

PRESENTATIONS

- 6. Community Air Risk Evaluation (CARE).** Scott Lutz, Air Quality Engineering Manager, stated that for the next fiscal year the Board recently approved approximately \$500,000 in funding for this program, which includes a new atmospheric modeler position. The District has purchased some additional monitoring and analytical equipment, and will contract with professional services for analysis of filter media. The District will reallocate existing resources as well. The program will establish diesel PM exposure trends, analyze risk from toxic air contaminants on a community basis, derive risk reduction strategies and obtain input from and outreach to the communities.

Reviewing the history of ambient monitoring by the District and the California Air Resources Board (CARB) for toxic air contaminants in the Bay Area since 1985, Mr. Lutz noted that the risk attributable to ambient toxics has dropped from 315 in a million in 1994 to 173 in a million in 2001, excluding diesel particulate matter (PM). CARB has estimated average statewide risk attributable to diesel PM dropped from 900 in a million in 1990 to 540 in a million in 2000. Such risk reductions are attributable to new vehicle emission standards, clean diesel fuel and reformulated gasoline, toxics new source review, and airborne toxic control measures applied to dry cleaning facilities and chrome plating operations.

The technical foundation of the CARE program will focus on the sampling and measurement of PM samples. Carbon 14 dating will be used to analyze the samples, which will be factored for temporal and seasonal variation and speciated for elemental and organic carbon constituents. Mr. Lutz noted estimates are that 75% of the ambient air risk is from diesel PM and, when combined with other mobile source toxics, the ambient air risk from diesel PM is about 90%.

The District is analyzing PM filter media from the 21 toxic air contaminant monitoring stations in the network. Equipment that distinguishes elemental from organic carbon is being installed in the District's chemistry laboratory. Data for all toxics emissions from mobile, point and area sources will be inputted into a one square kilometer gridded map for the entire Bay Area. The state's mobile source emission factor model, as well as a model from Caltrans, will be utilized in conducting air dispersion modeling for purposes of preparing a risk assessment. Based on areas of concern identified in the gridded map, a pilot cumulative risk assessment for stationary sources will be conducted in a selected area. Carbon emission inventory trends will be compared with ambient measurements, incorporating all current and future effective control measures and their impact on current ambient carbon levels. Staff will subsequently develop and implement area specific risk reduction measures for targeted areas, both in incentive-based and regulation-based programs.

Items on the legislative and regulatory horizon include low sulfur diesel fuel, heavy-duty diesel exhaust emission standards, the toxics new source review, and new or modified rules to reduce toxic emissions from area sources such as dry cleaners, gas stations, chrome plating. The District is also seeking authority to regulate heavy-duty diesel fleets as well as trains.

In reply to questions from Council members, the following responses were provided by District staff members Jack Broadbent, Executive Officer/APCO, Peter Hess, Deputy APCO, Gary Kendall, Technical Division Director, and Mr. Lutz:

- The CARE program will help identify the drivers of air toxic risk and help the District to determine where resources should be applied to obtain the greatest air toxic risk reduction.
- With regard to chemical markers for fuel additives and lube oil, the analysis will include all sources of carbon and allocate them either to the elemental or organic categories.
- In assessing data from other regional or local air toxics studies or programs, the District plans to coordinate with the county and state health departments.
- The CARE program focuses primarily on the risk from breathing ambient air and will not take into account the larger variety of factors deriving from personal lifestyle choices.
- The impact of heavy-duty diesel truck traffic across the California/Mexican border is best dealt with by seeking to cooperate with the federal Environmental Protection Agency and CARB.
- The CARE emissions estimates and analysis will be done broadly on grid for the entire Bay Area based on sampling data and modeling. The more focused risk assessment will be limited to a specific one kilometer region. There will be a Bay Area wide characterization of risk including stationary sources and mobile sources but the specific area cumulative risk analysis will be assessed based on a variety of different factors including the compaction of sources and will account for detailed meteorological data and terrain features on a block-by-block basis.
- The characterization of risk for the public will be in the context of a programmatic tool for best estimates and other risks, which will guide funding, regulation, rule-making.
- Low sulfur diesel fuel, which will further reduce emissions of diesel PM from newer engines and abatement equipment on older engines is becoming increasingly available. As of 2007, all diesel fuel will have to conform with low sulfur requirements. The transition to this type of fuel is comparable with the transition from leaded to unleaded gasoline a number of years ago.

Ms. Weiner stated that the Public Health Committee reviewed the CARE program and recommends that (1) before the data is gathered, in initial planning phase, staff meet with interested stakeholders to help develop data evaluation, criteria for community involvement, definition of disproportionately impacted communities; (2) a member of the Public Health Committee be included on the project steering committee; (3) that a District public outreach staff person with specific qualifications be assigned to this project.

In discussion, the Council members offered the following observations:

- greater attention might be given to the outreach component of the CARE program, comparable, perhaps to the level of preparation for the technical side. (Bedsworth)
- in terms of the emissions inventory, emissions from solvents and paints, and PM emissions from road dust, may be more significant than previously thought. (Bedsworth) Mr. Lutz replied that there is an emission inventory group working on the project and it will be consulted on this.
- the Technical Committee should examine the pros and cons of biodiesel fuel. (Shanahan) Dr. Bedsworth replied that the topic of alternate fuels has been assigned to the Technical Committee and that biodiesel can be included in the review process.

- the CARE project would benefit from greater public outreach right now, while assembling an advisory committee. (Blake) Mr. Broadbent replied that the District will hire a Community Relations Manager who will report to the Executive Officer and handle this task. Mr. Hess noted that Mr. Broadbent has spoken about CARE with Bay Area editorial review boards.
- perhaps the new Community Relations Manager could be entitled “Health Effects Officer” as in the South Coast AQMD. (Altshuler) Mr. Broadbent replied that the functions of the latter position are somewhat different from those envisioned for the Community Relations Manager.

- 7. Air & Waste Management Association (A&WMA) Annual Exhibition & Meeting.** Chairperson Blake deferred this item to the September 8 Advisory Council Regular meeting.

OTHER BUSINESS

- 8. Report of the Executive Officer/APCO.** Mr. Broadbent stated:

The District’s Spare the Air program is under way. Using federal Congestion Management Air Quality funds there will be free morning commutes in the Bay Area on Spare the Air days. There are also plans to wrap a BART train to advertise the Spare the Air program.

District staff discussed fuel cell technology with a number of stakeholders last Friday and received many excellent suggestions.

The state’s budget has not yet been finalized. Staff will provide recommendations to the Governing Board once the reduction in property tax revenue is known. The District has adopted its budget for FY 04-05 and felt it important to have it in place apart from the state budget situation.

- 9. Report of Advisory Council Chair.** Chairperson Blake stated she met with Mr. Broadbent last week and discussed the issue of indoor air quality.

- 10. Council Member Comments/Other Business.** Mr. Dawid inquired if the District will be included in the Joint Policy Committee (SB 849) with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). Mr. Broadbent responded that there are a number of proposals for representation on this Committee, including one that would add the Bay Conservation & Development Commission and the Regional Water Quality Control Board.

In reply to Mr. Shanahan, Mr. Broadbent replied that there are proposals to increase funding for the Carl Moyer program by modifying the Smog Check program and adding a fee of \$1 per tire for disposal purposes.

Ms. Weiner complimented staff on a first-rate Spare the Air media campaign.

- 11. Time and Place of Next Meeting.** 10:00 a.m., Wednesday, September 8, 2004, 939 Ellis Street, San Francisco, CA 94109.

- 12. Adjournment.** The meeting was adjourned at 12:00 noon.

James N. Corazza
Deputy Clerk of the Boards

AGENDA NO. 2

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

DRAFT MINUTES

Advisory Council
Air Quality Planning Committee Meeting
1:30 p.m., Tuesday, August 3, 2004

- 1. Call to Order – Roll Call.** 1:41 p.m. Quorum Present: Harold Brazil, Chairperson, Irvin Dawid, Emily Drennen, Fred Glueck, John Holtzclaw, Ph.D., Kraig Kurucz. Absent: Kevin Shanahan.
- 2. Public Comment Period.** There were none.
- 3. Approval of Minutes of June 15, 2004.** Dr. Holtzclaw moved approval of the minutes; seconded by Mr. Kurucz; carried unanimously.
- 4. District's Ozone Control Strategy.** Chairperson Brazil called for discussion on the District's Ozone Control Strategy. The following points were made in discussion of the Further Study Measure (FSM) on biodiesel:
 - a) some transit agencies consider biodiesel impractical as it entails a loss of warranty protection on vehicle engines. An AC Transit biodiesel demonstration project on buses revealed many engine breakdowns. Biodiesel does not major particulate matter (PM) reductions, but the extent of reductions in emission of NOx is less impressive. (Brazil)
 - b) biodiesel is being demonstrated in a refuse truck fleet in Berkeley and may be more applicable to this type of fleet rather than to an urban transit fleet. (Dawid)
 - c) the feasibility of this FSM will include evaluation of potential feed stock sources and several bench tests on various types of equipment to ascertain emission benefits. The District will evaluate emulsified fuel as well. (Henry Hilken, Environmental Planning Manager)
 - d) keeping fuel emulsified for a stand-by field generator can be costly and impractical. (Kurucz)
 - e) the purpose of alternative fuels is to reduce this country's dependence on petroleum. Biodiesel is also less polluting to produce than ethanol. (Dawid)

The following points were made in discussion of indirect source mitigation:

- (a) the San Joaquin Valley air district is considering a rule that would require a permit on land-use developments with certain types of air quality impacts and thereby provide an incentive for sound development. The District will closely track the rule given the potential for litigation from the building industry. State law requires that a nexus exist between a fee and the associated pollution mitigation. The District will continue to advocate Smart Growth. (Hilken)
- (b) four years ago, this Committee reviewed the District's indirect source mitigation authority in parking cash-out and urban heat island programs. (Glueck)

- (c) the Bay Area is much more Smart Growth and transit oriented than it was two decades ago. A number of years ago the Metropolitan Transportation Commission (MTC) analyzed an alternative transit scenario that included denser development, and parking cash-out, etc. The results from that alternative when compared with the preferred regional transportation plan scenario Regional Transportation Plan showed greater reductions in driving by 8%, in congestion by 15%, and in emission reductions by 7-8%. Since then, the Association of Bay Area Governments (ABAG) has conducted more compact projections. A repeat of the 1994 projections by MTC showed fewer land-use savings because of demographic changes and more compact projections. (Holtzclaw)
- (d) despite such projections from MTC and ABAG, land-use remains fragmented in the Bay Area with its 101 cities and nine counties. Despite transportation control measures (TCMs) and smart growth strategies, decision-making nevertheless remains with local entities. (Dawid)
- (e) congestion acts as an educator and motivator toward Smart Growth; and planning grants are an effective way of providing communities with input. (Holtzclaw)
- (f) The District should use its financial influence in grant allocation as a motivator to get cities to reduce trips and vehicle miles traveled (VMT), and also to encourage Smart Growth. (Glueck)

Chairperson Brazil stated the Committee has so far identified two issues in its discussion. The first concerns the FSM on alternative fuels, and the second advocates getting regional planning assistance for local planners and to promote Smart Growth. Mr. Glueck suggested that the District be more aggressive in communicating with and educating local planners. Mr. Dawid stated that the District should also comment on controversial projects from a regional perspective.

Mr. Hilken replied that the District's comments in environmental review primarily concern major projects. However, having input at the general plan or specific plan level is better because it occurs earlier in the process. He added that the District has a project endorsement process in which criteria on density and access would be discussed in comment letters. The Committee could comment on and prioritize the items set forth in TCM No. 15. Also, the Transportation Fund for Clean Air provides extra points for the implementation of TCMs. Mr. Kurucz opined that influence on traffic locally and regionally is also achieved through setting forth appropriate categories of review in proposals that come to local decision-makers.

Mr. Hess observed that the Committee's comments emphasize the implementation of TCM No. 15. The Council's assistance in communicating information to local planners and governments in the nine Bay Area counties would also be very useful. A couple of years ago, District staff and Councilmember Hayes made presentations to the planning departments of local entities on urban heat island mitigation. Mr. Hess suggested that the Committee consider ways of implementing TCM No. 15 after the Ozone Control Strategy is adopted. It would get local entities involved in applying regional principles locally.

Chairperson Brazil suggested the Committee include in its formal recommendations that Council members attend meetings with local planners. Mr. Hess stated these meetings would combine staff and the Council, and emphasize woodsmoke abatement, urban heat islands, Smart Growth and the Spare the Air program. Mr. Glueck suggested the Committee keep in mind that such efforts do not have to be limited to redevelopment and planning departments but could also include major developers and their planning staff. If the latter make the appropriate proposal to the local decision makers then the ideal planning categories would already be incorporated in project development.

After further discussion, Mr. Kurucz moved that the Committee adopt the following recommendations; seconded by Dr. Holtzclaw; carried unanimously:

The Advisory Council agrees that the District staff has selected appropriate measures:

- 1. for review and adoption as control measures or further study measures.*
- 2. as transportation control measures.*
- 3. from other Districts for review and adoption as control measures or further study measures.*

The Council also has the following line items that it further wishes to comment on in the Plan:

- 1. The District include a FSM for alternative fuels, specifically including but not limited to emulsified, ethanol, biodiesel and other fuel types. The District should take into account their applicability under existing and future technologies.*
- 2. The District and Council work in concert to explore the local and regional implementation of items identified in TCM No. 15.*

The Committee agreed that the implementation of TCM No. 15 should be the primary task of its work plan for next year.

- 5. Committee Member Comments/Other Business.** There was brief discussion on pending legislation proposing the elimination of exemption for vehicles 30-years and older in the state's Smog Check program.
- 6. Time and Place of Next Meeting.** 9:30 a.m., Tuesday, October 12, 2004, 939 Ellis Street, San Francisco, CA 94109.
- 7. Adjournment.** 3:25 p.m.

James N. Corazza
Deputy Clerk of the Boards

AGENDA NO. 2

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

August 3, 2004

To: Elinor Blake, Chairperson and Members of the Advisory Council
From: Harold Brazil, Chairperson and Members of the Air Quality Planning Committee
Re: Committee Recommendation on the District's Ozone Control Strategy

At its meeting of August 3, 2004, the Air Quality Planning Committee adopted the following recommendations which it urges the full Advisory Council to adopt regarding the District's Ozone Control Strategy:

The Advisory Council agrees that the District staff has selected appropriate measures:

1. for review and adoption as control measures or further study measures.
2. as transportation control measures.
3. from other Districts for review and adoption as control measures or further study measures.

The Committee has the following line items that we further wish to comment on in the plan:

1. The District include a FSM for alternative fuels, specifically including but not limited to emulsified, ethanol, biodiesel and other fuel types. The District should take into account their applicability under existing and future technologies.
2. The District and Council work in concert to explore the local and regional implementation of items identified in Transportation Control Measure No. 15.

HB:jc

AGENDA NO. 3

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

DRAFT MINUTES

Advisory Council
Technical Committee Meeting
1:30 p.m., Wednesday, August 4, 2004

1. **Call to Order – Roll Call.** 1:40 p.m. Quorum Present: Louise Bedsworth, Ph.D., Chairperson, Sam Altshuler, Bob Bornstein, Ph.D., William Hanna, John Holtzclaw, Ph.D., Norman A. Lapera, Jr. Absent: Stan Hayes.
2. **Public Comment Period.** Dr. Holtzclaw distributed for information the Air Quality Planning Committee's comments that it adopted yesterday on the District's Ozone Control Strategy.
3. **Approval of Minutes of June 3, 2004.** Dr. Holtzclaw requested that "Plan" be changed to "Plans" on line one of paragraph four on page three; and "Holtsclaw" to "Holtzclaw" on line one of the final paragraph on page 12. He moved the approval of the minutes as corrected; seconded by Dr. Bornstein; carried unanimously.
4. **District's Ozone Control Strategy.** Chairperson Bedsworth reviewed her July 7, 2004 memorandum entitled "Discussion of District Ozone Reduction Strategies and Planning." In discussion, Jean Roggenkamp, District Planning Division Director, and Phil Martien, Senior Atmospheric Modeler, proposed the following editorial suggestions to the memorandum:
 - a) Under *Ambient Trends* replace "significant" with "sufficient" in line six.
 - b) Under *District Modeling Efforts* in line two replace "is underestimating temperature, wind speed, and O₃" with "underestimates wind speed in some areas of the Bay Area, but performs well for Bay Area O₃." In line three, end the sentence at "disparities." Add a second sentence to read: "Based on comparisons to a fuel-based estimate, modeling inventories appear to underestimate VOC from on-road vehicles in the Bay Area." Append a new bullet to read: "The model underestimates temperatures and ozone in the San Joaquin Valley." In the next to last bullet, line two of page two, replace "affect" with "reduce and may even increase."
 - c) Under *EMFAC2002* insert "NO_x" before "emissions" in line one and add at the end of that sentence "especially in the San Joaquin Valley. NO_x emissions from heavy-duty diesel sources are not well represented." In line five, replace "weighted by reactivity" with "speciated by EMFAC." In line six, replace "Model" with "EMFAC."
 - d) Under *NO_x Control Measures*, on line nine add to the third sub-bullet " , unless heavy-duty diesel is specifically targeted."
 - e) Under *Key Findings*, on line nine under No. 2(b) after "mobile sources" add "including light-duty mobile." Delete 2(c) entirely. End the first sentence of No. 5 "Monday." Replace "but it is not" with "it is" and replace "or" with "and" prior to "activity."

Replace “are well understood” with “especially for heavy-duty diesel sources, need to be more accurately represented in modeling inventories on these days.”

Chairperson Bedsworth called for public comment, and the following individual came forward:

Steve Ziman
ChevronTexaco Energy Technology Company
Richmond, California

stating it will be necessary to review the modeling simulations from the Central California Ozone Study (CCOS) and to assess the analyses of data relative to the ozone episodes before firm conclusions about the ozone control strategy can be reached. Smog algorithms can help to assess the benefits and disbenefits of each ozone precursor, along with ozone response surface runs on the base case to see how the model responds to the reduction of each precursor. While NO_x concentrations decrease downwind it would be helpful to know what the active volatile organic compounds (VOCs) are downwind and if fresh NO_x will react to them. These dynamics need further review.

In response to Committee member comments that the text should recognize improved model performance, Ms. Roggenkamp noted that while some information has been provided today, further work is needed for the technical analysis. Control measures for the ozone strategy will have to be based on the modeling results, but these have not yet been completed.

The Committee discussed the text and reached consensus on the following modifications:

Under *Relevant Meetings & Topics* add “on ozone planning within the last year” and include today’s meeting in the chronology.

Add a heading to immediately follow the above heading entitled *Committee Findings*.

Change *Ambient Trends* to *Observed Trends*. In the first bullet add “one hour” before “standard.” In the second bullet, recognize the District’s successful work in targeting the most reactive VOCs, in light of longer reaction times and the corresponding impact on inter- and intra-basin transport. Thematically combine the third and fourth bullets with their focus on temperature and include that in the sixth bullet on meteorological conditions, indicating: “Maximum ozone levels in the Bay Area are very close to the one-hour federal standard. Thus, attainment is highly susceptible to extreme meteorological conditions, such as extension of a sustained (2-3 days) inland regional high over the Bay Area that impedes on-shore breeze flow and results in higher than normal temperature, maximizes UV and lower mixing depth.” Delete the fifth bullet on design values.

Under *District Modeling Efforts* indicate that they are “reproducing observed ozone patterns during exceedances periods, but additional efforts are needed to understand all major interactions between emissions, modeling, and chemistry.”

Under *Control Measures*, incorporate the staff’s proposed edit on how certain NO_x measures may increase ozone locally. Add a second sentence to indicate: “But, these measures could reduce ozone in the Central Valley.” In the third bullet delete “Need” and insert “Many further reductions”; and delete “that” prior to “are from sources under the jurisdiction of CARB and EPA.”

Place the text included under the *EMFAC 2002* heading under *District modeling efforts* with these modifications: (a) Add the new bullet suggested above by staff on fuel-based estimates. (b) To the end of the first bullet add “on-road heavy duty diesel vehicles.” (c) Conclude the second bullet at “2000.” (d) Replace “model” with “EMFAC” in the fourth bullet.

Change *NOx Control Measures* to *Control Measures*, and (a) delete the first bullet; (b) delete the second sub-bullet from the second bullet; (c) add a statement indicating that “previous modeling and data analysis indicates that, in the Bay Area, VOC reductions are more effective in reducing peak ozone concentrations than NOx reductions. However, ongoing modeling and data analysis will determine if this is still the case.”; (d) add: “Changes in NO:NO2 ratios in diesel vehicle exhaust could change the importance of NOx reductions and ozone chemistry.” This will account for the need to distinguish nitrogen oxide (NO) from nitrogen dioxide (NO2) emissions as these relate to ozone formation from diesel engine after-treatment technology.

Replace *Findings* with *Recommendations for Further Study*, and note that these are based on the entirety of *Committee Findings* outlined earlier in the document. The text should read as follows:

The District should continue to improve model performance, particularly in the following areas:

- *More accurately represent emissions from heavy duty diesel vehicles,*
- *Characterize NO and NO2 emission fractions from diesel vehicles and hydrocarbon speciation more generally.*

Apply the improved model to understand:

- *Inter- and intra-basin transport issues,*
- *Emission reductions scenarios, with particular emphasis on the impact of the relative reduction of VOC and NOx emissions, and*
- *Impacts of various urbanization growth patterns.*

Many of the “low hanging fruit” have been picked. The District needs to place continuing pressure on CARB and EPA to pass stringent regulations over sources outside the District’s jurisdiction.

Mr. Hanna moved the Committee adopt the text as revised for forwarding to the full Council on September 8; seconded by Mr. Altshuler; carried unanimously.

5. Committee Member Comments/Other Business. There were none.

6. Time and Place of Next Meeting. 9:30 a.m., Tuesday, October 12, 2004, 939 Ellis Street, San Francisco, CA 94109.

7. Adjournment. The meeting adjourned at 4:15 p.m.

James N. Corazza
Deputy Clerk of the Boards

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AGENDA NO. 3

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

August 8, 2004

To: Elinor Blake, Chairperson and Members of the Advisory Council

From: Louise Bedsworth, Chairperson and Members of the Technical Committee

Re: Committee Recommendations on District's Ozone Planning

At its meeting on August 4, 2004, the Technical Committee adopted the following set of findings and recommendations for further study on the District's ozone planning which it urges the full Advisory Council to adopt.

Relevant Meetings and topics on ozone planning within the last year

- December 9, 2003: Ozone, NO_x, and HC ambient concentration trends in the Bay Area; Update on District modeling efforts
- February 24, 2004: Control Strategy Review
- April 6, 2004: Control Strategy Descriptions
- June 3, 2004: Review of EMFAC2002; NO_x Controls and Ozone Formation
- August 4, 2004: Update from staff

Committee Findings

Based on the information presented at the above meetings and committee discussion, we have collected the following set of findings regarding the District's ozone planning process.

Observed trends

- Since 1965, the number of days above the one-hour standard, ozone levels measured, and the number of stations per ozone episode have decreased.
- Ozone formation times are getting longer due to successful efforts to reduce reactive compound precursor emissions. Slower reactivity may have impacts for intra- and inter-basin downwind areas.
- Maximum ozone levels in the Bay Area are very close to the one-hour federal standard. Thus, attainment is highly susceptible to extreme meteorological conditions, such as:
 - Extension of a sustained (2-3 day) regional high over the Bay Area that impedes on-shore breeze flow and results in higher than normal temperatures, increase ultraviolet radiation, and lower mixing depth.

District Modeling Efforts

- BAAQMD modeling efforts are reproducing observed ozone patterns during exceedance periods, but additional efforts are needed to understand all major interactions between emissions, modeling, and chemistry.
- Heavy duty diesel vehicle travel patterns are not well represented in EMFAC 2002.
- A fuel-based emission inventory indicates that NO_x emissions from on-road heavy duty diesel vehicles are underestimated, especially in the San Joaquin Valley.
- EMFAC 2002 does not account accurately for an increase in diesel fuel sales between 1990 and 2000.

Control Measures

- All feasible control measures must be identified and adopted for the District to be in compliance with the California Clean Air Act.
- Some NO_x measures if adopted in the Bay Area may not reduce, and may increase, ozone locally. But, these measures could reduce ozone in the Central Valley.
- Most stationary source measures have been adopted to date. Many further reductions are needed from sources under the jurisdiction of the CARB and EPA.
- Previous modeling and data analysis indicates that, in the Bay Area, VOC reductions are more effective in reduce peak ozone concentrations than NO_x reductions. However, ongoing modeling and data analysis will determine if this is still the case.
- Changes in NO:NO₂ ratios in diesel vehicle exhaust could change the importance of NO_x reductions and ozone chemistry.

Recommendations for further study

From the above set of findings, we make the following recommendations:

1. The District should continue to improve model performance, particularly in the following areas:
 - More accurately represent emissions from heavy duty diesel vehicles,
 - Characterize NO and NO₂ emission fractions from diesel vehicles and hydrocarbon speciation more generally.
2. Apply the improved model to understand:
 - Inter- and intra-basin transport issues,
 - Emission reduction scenarios, with particular emphasis on the impact of the relative reduction of VOC and NO_x emissions, and
 - Impacts of various urbanization growth patterns.
3. Many of the “low hanging fruit” have been picked. The District needs to place continuing pressure on CARB and EPA to pass stringent regulations over sources outside the District’s jurisdiction.

AGENDA NO. 4

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

DRAFT MINUTES

Advisory Council Public Health Committee Meeting
1:30 p.m., Wednesday, August 9, 2004

1. **Call to Order – Roll Call.** 1:38 p.m. Quorum Present: Linda Weiner, Chairperson; Diane Bailey, Elinor Blake, Victor Torreano. Absent: Sanjiv Bhandari, Jeffrey Bramlett, Brian Zamora.
2. **Public Comment Period.** There were no public comments.
3. **Approval of Minutes of May 12, 2004.** Mr. Torreano moved approval of the minutes; seconded by Ms. Bailey: carried.
4. **Indoor Air Quality.** Chairperson Weiner reviewed the two documents in the agenda packet entitled, *Report to the California Legislature: Indoor Air Pollution in California, California Air Resources Board (CARB), June 2004*, and *Indoor Air Technical & Policy Issues: An Update for the BAAQMD Advisory Council, by Jed Waldman, Ph.D., Chief, Indoor Air Quality Section, California Department of Health Services, May 12, 2004*. She stated that at this time there is no comprehensive and coordinated strategy on indoor air quality. Regulatory jurisdiction is spread throughout a variety of agencies.

Ms. Blake distributed her August 9, 2004 memorandum to the Committee entitled *Rough draft idea for a recommendation to the Council concerning the District's role in indoor air quality*. She observed that the CARB report was issued at the request of the Legislature and attests to the widespread health effects associated with indoor air pollution. Noting that the Air District has a rare opportunity to explore its potential role in this field, she offered two suggestions:

- 1) that the District convene a workshop or series of workshops in which researchers, organizations and regulatory agencies associated with indoor air quality could discuss the District's role. The workshops could be convened within the Bay Area with either a broad statewide invitation or as Bay Area-only but with representation from appropriate State agencies.. Key features of the discourse would include identifying current agency roles in indoor air quality and recommendations for future research, education and regulation.
- 2) That the District annually sponsor a graduate student scholarship for research in indoor air quality. This would provide both visibility and a connection with local academic institutions.

Mr. Torreano observed that building materials are a major source of the indoor air pollutants, particularly formaldehyde in pressboard and insulation. In commissioning buildings, contractors heat the interior to treat caulking and epoxies. However, any deficiencies in the

commissioning process require review. If the proper installation and maintenance of building materials could be incorporated into building codes, this would reduce indoor air pollution. Ms. Bailey suggested that the Committee review the study of the toxicity of formaldehyde in the recent rulemaking by the Environmental Protection Agency (EPA) on wood products. Peter Hess, Deputy APCO, added that formaldehyde is used in plywood resin as a material binder, and is also found in the resin in caulking materials. The latter are regulated as consumer products by CARB, which is currently evaluating an air toxic control measure in this field.

Mr. Hess referred to an advertisement in today's San Francisco Chronicle for an indoor ozone generator, which asserts that ozone has a good effect on health. Chairperson Weiner suggested that the District consider issuing a letter to the editor correcting that misconception. Mr. Torreano observed that the CARB report on indoor air quality addresses this type of equipment.

Mr. Hess noted that the District regulates volatile organic compounds (VOCs) in paints and has adopted stringent rules in this field. The District's perchlorethylene (perc) rule, which is based on toxic air contaminant regulation, far exceeds the stringency of the CARB rule for perc dry cleaners. The District's authority to regulate perc derives from the California Health & Safety Code and is based on ambient air quality management. There may be indoor air quality benefits that derive from the rule but these cannot form the basis for its adoption.

Ms. Bailey opined that any District action on indoor air quality should not supplant its concern with or work on ambient air quality. However, other fields of indoor exposure, such as inside vehicles, and in occupational settings like an excavator or a highway tollbooth, should also be considered. Jack Broadbent, Executive Officer/APCO stated that the South Coast AQMD conducted an in-vehicle study in the 1980's that showed elevated levels of most of the compounds for which the agency monitored. The National Resources Defense Council has also conducted a study on air in buses. Chairperson Weiner noted that the American Lung Association is presently studying indoor air quality in the context of school buses.

Ms. Hess suggested that the Council consider working with staff in contacting and working with planning departments in Bay Area cities and counties. Council member Hayes has previously participated with District executive management in speaking to local governments about urban heat island mitigation. Such Council/staff outreach could be extended to the effort to influence building codes. The Council, in concert with staff, would develop the presentation, which would concern guidelines, recommendations and identify key issues. Ms. Blake suggested that local government staff be included on the invitation list to the above-mentioned workshops. Noting that the District was successful years ago in getting local entities to adopt air quality elements in their general plans, she suggested that a comparable general plan amendment for building codes could be studied. This may be a topic for next year's Advisory Council Retreat.

Mr. Torreano noted that the apprentice sheet metal workers in his union are trained in various ventilation processes. It would be ideal for a union training department to incorporate indoor air quality certification processes into an apprenticeship program. However, at the present time there are neither guidelines nor certification processes associated with the installation or maintenance of industrial air duct cleaners for hospitals and municipalities. Mr. Broadbent observed that there are building heating and ventilation guidelines on airflow, but these do not address indoor air quality concentrations. That is why the field of indoor air quality is ripe for review with regard to potential courses of regulatory action.

Jack Colburn, Senior Policy Advisor, stated that EPA has produced a packet on the “Tools for Schools” program, one of which will be provided to each Committee member. It provides a number of key sources of information. Guidance can be gleaned from the packet materials and reviewed for possible application to other indoor situations. A considerable amount of information on indoor air quality is generally available but there is no clearinghouse for it. Molds in buildings and homes are the major indoor air issue in the state. Ms. Blake noted that the State Health Department has active programs on mold in indoor building environments.

Mr. Broadbent suggested that at an off-site location next year the Board and Council hold a Retreat on indoor air quality. Prior to the Retreat, the Council could adopt recommendations for the Board to consider. In addition to the state of the science on indoor air quality, the discussion could include establishing standards for smaller sources comparable to the regulation of back-up diesel generators that are found in many buildings. It could involve a component in which owners of back-up generators, as well as building maintenance staff, could also be educated about ventilation systems and integrate ambient and indoor air quality management awareness.

Mr. Broadbent added that in the Bayview Hunters Point area, where there are higher incidences of asthma, there is no program to deal with indoor air quality. Mr. Hess suggested that perhaps indoor air could be included in the forthcoming public meetings on the Ozone Control Strategy. Mr. Broadbent added that the Community Air Risk Evaluation (CARE) program would be addressed in these community meetings. Ms. Roggenkamp indicated that the meetings would begin in late September and continue through mid-October.

Chairperson Weiner opined that the review of indoor air quality in Bayview Hunters Point, as it relates to the incidence of asthma, should not supplant the District’s careful review of permitting an electrical generating power plant since the emissions may also influence the incidence of asthma in that area. Ms. Bailey added that care must be taken in framing the categories of discourse on indoor air quality and asthma.

Ms. Blake inquired if there could be an immediate augmentation of programs in which the District encourages the development of educational and advisory materials for distribution in residential neighborhoods. Mr. Colburn replied that checklists for home inspections are available and there are scientifically proven building materials that meet both environmental and energy conservation ratings.

Mr. Broadbent added that such material may not be widely distributed, and this issue could be discussed in the workshop. Chairperson Weiner stated that from the perspective of social marketing, tailoring the principles of the meeting and the materials to be presented to a given audience is always to be recommended.

Ms. Blake suggested the following additions to the proposed recommendation, based on today’s discussion:

- In No. 3, prior to “we recommend that” add “to augment—but in no case to supplant—the District’s activities to improve ambient air quality” and before “in which” in the first line add “within the next year”.

- In the first bullet under No. 3, add a second sentence to read: “Included among the issues to be addressed should be their building materials and their appropriate installation and maintenance.”
- After “or workshops” in No. 3 in the first line add “or summit.”
- Delete “state policy” from the last line in No. 3 and insert “and programs” in its place.

Mr. Torreano moved adoption of the text as amended for forwarding on September 8 to the Council; seconded by Ms. Bailey; carried unanimously. The Committee directed that the members absent from today’s meeting receive the revised document via e-mail and be invited to separately submit comments to the Clerk for inclusion in the Council meeting agenda packet.

In reply to Chairperson Weiner, Emily Hopkins, Public Information Officer, stated that to date 30 cities and 6 counties have adopted the District’s wood smoke ordinance. There are approximately 100 incorporated cities and nine counties in the District’s jurisdiction, two counties of which are partial counties with some jurisdiction from another air district.

- 5. Committee Member Comments/Other Business.** Ms. Blake inquired as to the District’s view of a proposal by the Governor’s California Performance Review commission to eliminate CARB. Mr. Broadbent stated the District would respond with a letter of support for CARB. Ms. Blake suggested the Council might consider endorsing such an action by the District.
- 6. Time and Place of Next Meeting.** Monday, October 25, 2004, 1:30 p.m. 939 Ellis Street, San Francisco, California 94109. The September 8, 2004 Committee meeting is canceled.
- 7. Adjournment.** 3:01 p.m.

James N. Corazza
Deputy Clerk of the Boards

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Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

August 9, 2004

To: Chairperson Haggerty and Members of the Board of Directors Executive Committee

From: Chairperson Blake and Members of the Advisory Council

Subject: Air District Role in Indoor Air Quality

Topic

The District's role in Indoor Air Quality (IAQ) management.

Background

Indoor air pollutants present a well-documented harm to the public's health. Studies of the health effects and their considerable scope are summarized in the recent California Air Resources Board (CARB) draft report, *Indoor Air Pollution in California*, June 2004 (<http://www.arb.ca.gov/research/indoor/ab1173/ab1173.htm>). Pollution indoors is generated both from within buildings, and from the air outside. Many California agencies and universities are engaged in various aspects of research and education on the subject, but, in the words of the CARB draft report, "there is no systematic program [in California] to improve indoor air quality, there are relatively few regulations or standards to address individual indoor air quality problems, and few resources focused on effectively addressing problems and promoting improvements. Current efforts to address indoor pollution are not commensurate with the scope of the risk to health it poses to Californians."

Recommendations

In this vacuum, the District is presented with an unusual opportunity to explore creatively its potential role in improving indoor air quality, which affects the health of everyone in the Bay Area. To augment—but in no case to supplant—the District's activities to improve ambient air quality, we recommend that:

- (1) The District convene or initiate a workshop or series of workshops, or summit, within the next year in which government agencies, researchers, and organizations concerned with IAQ can discuss the current and potential roles of the District and others in improving IAQ. Included among the issues to be addressed should be building materials and their appropriate installation and maintenance. These workshops might be convened as statewide, involving other Air Districts, or as Bay Area workshops with state agency representation. Such workshop(s) would provide a forum for the generation and exchange of ideas and information to develop District proposals and programs for a cohesive approach to IAQ.

- (2) The District consider establishing a graduate student investigator initiative to research impacts of regional air pollution on indoor environments. The Bay Area has an impressive number of universities that conduct research on IAQ: this initiative would allow the District to tap into those resources at relatively little cost, with the added benefit of providing recognition to the District. CARB, CDHS and other agency experts could also be mentors. The District could administer the program or arrange with another entity to do so (e.g., a non-profit such as the Public Health Institute; a university President's Office; a Bay Area foundation). Students would apply annually for the funds, and a review committee would select among the proposals. The California Interagency Working Group on Indoor Air Quality, in which the District participates, could assist by suggesting potential IAQ-related research topics.

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

August 19, 2004

To: Advisory Council

From: Irvin Dawid

Re: Draft Resolution by Advisory Council of the Bay Area Air Quality Management District to retain independence of California Air Resources Board (ARB)

1. Whereas the Advisory Council is composed of citizen members representing various groups within the Bay Area whose job is to advise the Board of Directors of the Bay Area Air Quality Management District;
2. Whereas this diverse Council recognizes the critical importance of maintaining an independent California Air Resources Board in order to achieve clean air throughout the state;
3. Whereas the ARB is responsible for an improvement in air quality throughout the state because of precedent-setting strategies, including, but not limited to:
 - a. Improved fuel standards
 - b. Improved emission standards for new motor vehicles sold in California
 - c. Improved smog check programs to ensure that existing motor vehicles are not excessively polluting
 - d. Implementing the Carl Moyer program to reduce nitric oxide and particulate emissions from diesel engines and equipment throughout the state
4. Whereas the ARB is continuing its path of improving air quality by exploring new strategies, including, but not limited to:
 - a. Understanding the relationship of land use to air quality
 - b. Working to reduce greenhouse gas emissions
5. Whereas the California Performance Review Team has recommended that the ARB be dissolved and absorbed into a centralized state Department of the Environment
6. And Whereas we believe that its absorption would inevitably decrease its effectiveness,

Therefore the Advisory Council resolves that it is in the best interests of the residents and workers in the Bay Area that the California Air Resources Board remain an independent agency within the State of California.